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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,505	02/11/2004	Robert William Dobbs	200209625-1	5267

7590 01/04/2007  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER
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AMAYA, CARLOS DAVID

ART UNIT	PAPER NUMBER
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2836

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/04/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/777,505

Applicant(s)

DOBBS ET AL.

Examiner

Carlos Amaya

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This communication is responsive to amendments filed on 10/06/2006.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koch (US 6,153,946) in view of Coglitore (US 2004/0228087).

With respect to claim 1 Koch discloses a power distribution system comprising: at least one load (Device circuits 28, 30 and 32); a plurality of power sources (Power supplies 20, 22, 24 and 26), and an interconnect arrangement including a plurality of interconnects (Power sharing cables 60, 62 and 64), the interconnects connecting each load to a given number of the sources so that each load is fully powered and if any one source fails, all loads of the at least one load remain fully powered (As shown in figure 1A each device 14, 16 and 18 are interconnected with their own power supplies and the power supplies of the other devices providing redundancy to each of the device circuits when one of the power supplies fails, see abstract).

Koch, however, does not disclose expressly that each of the at least one load is operable to be mounted in a rack location; and that each power source is operable to be mounted in a rack location not having a load.

Coglitore discloses on page 9 paragraph (0078) and paragraph (0081), that power supplies modules 6 and computing units 8 (loads) of figures 7A, 7B and figure 9 are housed in separate racks. The power supplies are mounted in the rack without a load, as described by Coglitore.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Coglitore with the invention disclosed by Koch.

The suggestion or motivation for doing so would have been to facilitate the cooling of the electronic components as disclosed by Coglitore.

With respect to claim 2 Koch in view of coglitore disclose the power distribution system of claim 1, wherein all of the sources are DC sources (Koch, Column 3 lines 38-41).

With respect to claim 3 Koch in view of coglitore disclose the power distribution system of claim 1 wherein all of the sources are AC sources (Koch, Column 3 lines 41-46).

With respect to claim 13 Koch discloses a power distribution system comprising: a plurality of loads (Device circuits 28, 30 and 32); a plurality of power sources (Power supplies 20, 22, 24 and 26), the power sources having a collective capacity to fully power all of the loads (Column 4 lines 25-30), and an interconnect arrangement including a plurality of interconnects (Power sharing cables 60, 62 and 64), the interconnects connecting each load to a given number of different ones of the sources so that each load is fully powered notwithstanding failure of any one of the sources (As

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shown in figure 1A each device 14, 16 and 18 are interconnected with their own power supplies and the power supplies of the other devices providing redundancy to each of the device circuits when one of the power supplies fails, see abstract).

Koch, however, does not disclose expressly that each load is operable to be mounted in a rack location; and that each power source is operable to be mounted in a rack location not having a load.

Coglitore discloses on page 9 paragraph (0078) and paragraph (0081), that power supplies modules 6 and computing units 8 (loads) of figures 7A, 7B and figure 9 are housed in separate racks. The power supplies are mounted in the rack without a load, as described by Coglitore.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Coglitore with the invention disclosed by Koch.

The suggestion or motivation for doing so would have been to facilitate the cooling of the electronic components as disclosed by Coglitore.

Claim 14 a method of distributing full power to each one of a plurality of loads comprising providing a plurality of power sources, the power sources being sufficient in number and capacity such that a combination of less than all of the sources is sufficient to power each load; and connecting each load to a given number of the sources so that if any one source fails, each of the loads remains fully powered. One of ordinary skill in the art would have necessarily performed the recited method steps when using the power distribution system of claim 1, as disclosed by Koch in view of Coglitore.

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4. Claims 4-6, 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koch (US 6,153,946) in view of Coglitore (US 2004/0228087).

With respect to claim 4 Koch in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load, power source and interconnect arrangement comprises a power distribution subsystem (Koch, Subsystem composed of Devices 88 and 92), wherein the at least one load includes first and second loads (Device 88 and Device 92 respectively), wherein the plurality of sources includes first and second sources (Power supply device 88, Power supply device 92 respectively), and wherein the interconnect arrangement (Power sharing cable 98) includes interconnects that connect the first load to the first and second sources and the second load to the first and second sources (Figure 3 of Koch invention shows that the diodes and power sharing cable 98 connects the loads with the first and second power supplies).

However, Koch in view of Coglitore does not disclose expressly that the first and second loads are X watts and that the first and second sources are 2X watt sources. One of ordinary skill in the art would have provided sources that have a greater power output than that consumed by the loads as disclosed by Koch (Column 7 lines 49-60). Therefore it would have been obvious to provide power supplies, as disclosed by Koch, to produce power that is twice as much than that consumed by the loads.

The suggestion or motivation for doing so would have been to provide a redundant system that is reliable and able to provide power to the loads when one or

more power sources are disabled, thus increasing the redundancy of the system without having to worry about a component of the system being without power.

With respect to claim 5 Koch in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load, power source and interconnect arrangement comprises a power distribution subsystem (Subsystem composed of Devices 88 and 92), wherein the at least one load includes a load (Device circuits of Device 88), wherein the plurality of sources includes first and second sources (Power supply of Device 88, and power supply of Device 92 respectively), and wherein the interconnect arrangement includes interconnects that connect the load to each of the first and second sources (Figure 3 shows that the diodes and power sharing cable 98 connects the loads with the first and second power supplies).

However, Koch in view of Coglitore does not disclose expressly that the load is a 2X watts load and that the first and second sources are 2X watt sources. One of ordinary skill in the art would have provided sources that supply an equal or greater power consumed by the loads as disclosed by Koch (Column 7 lines 49-60). Therefore it would have been obvious to one of ordinary skill in the art to provide two power sources in Koch invention that supply an equal amount of power consumed by one load as disclosed by Koch (Column 7 lines 49-60).

The suggestion or motivation for doing so would have been to provide a redundant system that is reliable and able to provide power to the loads when one or more power sources are disabled, thus increasing reliability of the redundancy of the system without having to worry about the load being without power.

With respect to claim 6 Koch in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one loads, power sources and interconnect arrangement comprises a power distribution subsystem, wherein the at least one load includes a load (Device circuits, Device 88), wherein the plurality of sources includes first, second, and third sources (Power supply of Devices 88, 90 and 92), and wherein the interconnect arrangement includes interconnects that connect the load to each of the first, second, and third sources (As can be seen on figure 3 Power sharing cables 94, 96 and 98 they interconnect with the Device circuits of Device 88, so that power can be shared between the different power supplies).

However, Koch in view of Coglitore does not disclose expressly that the load (Device 88) is a 4X watts load and that the first, second, and third sources are 2X watt sources. One of ordinary skill in the art would have provided sources that supply an equal or greater power than that consumed by the load as disclosed by Koch (Column 7 lines 49-60). Therefore it would have been obvious to one of ordinary skill in the art to provide Koch invention with three power sources that when combined together supplied an amount of power that is greater than the power consumed by a load.

The suggestion or motivation for doing so would have been to provide a redundant system with power supplies that are reliable and able to provide power to the loads when one or more power sources are disabled, thus increasing reliability of the redundancy of the system without having to worry about the load being without power.

With respect to claim 10 Koch in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load includes first, second, and third loads



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(Device circuits of Device 88, Device circuits of Device 90, Device circuits of Device 92), wherein the plurality of sources includes first, second, and third sources (Power Supply Device 88, Power Supply Device 90, Power Supply Device 92), and wherein the interconnect arrangement (Power sharing cables 94, 96 and 98) includes interconnects that connect each of the first, second, and third loads to two different ones of the sources while connecting each of the first, second, and third sources to two different ones of the loads (As shown in figure 3, each Device circuits are connected to two power supplies in a redundancy manner).

However, Koch in view of Coglitore does not disclose expressly that the first, second, and third loads are 2X watts loads, and that the first, second, and third Source are 4X watts sources. Koch discloses that the power sources have to supply the loads with an equal or greater power than that consumed by the loads (Column 7 lines 49-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide power sources in Koch invention that produce greater power than the power consumed by the load, namely the same number of sources that produce twice as much power than that consumed by the same number of loads, since each of the load is connected to two power supplies when one supply fails the other supplies the necessary power to the load.

The suggestion or motivation for doing so would have been to have a power supply that produces enough power to supply to a load when one of the two power supplies fails, thus increasing reliability of the redundancy of the system without having to worry about the load being without power.

With respect to claim 11 Koch in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load includes first and second loads (Device circuits of Device 88, Device circuits of Device 92), wherein the plurality of sources includes first, second, and third sources (Power Supply Device 88, Power supply Device 90, Power Supply Device 92), and wherein the interconnect arrangement (Power sharing cables 94, 96 and 98) includes interconnects that connect each of the first and second loads to each of the first, second, and third sources (As shown in figure 3, Device circuits 88 and 92 are interconnected to the power supplies in a redundancy manner, thus when of the supplies fails power for the load is borrowed from the power supply above it).

However, Koch in view of Coglitore does not disclose expressly that the first and second loads are 4X watts loads, and that the first, second, and third Source are 4X watts sources. Koch discloses that the power sources have to supply the loads with an equal or greater power than that consumed by the loads (Column 7 lines 49-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide sources in Koch invention that produce greater power than the power consumed by the load, namely three power sources that produce an equal amount of power than that consumed by the two loads, since each of the load is connected to the three power supplies when one supply fails the other supplies the necessary power to the load.

The suggestion or motivation for doing so would have been to have a power supply that produces enough power to supply to a load when one of the two power

supplies fails, thus increasing reliability of the redundancy of the system without having to worry about the load being without power.

With respect to claim 12 Koch in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load includes a load (Device circuits of Device 88), wherein the plurality of sources includes first, second, and third sources (Power Supply Device 88, Power supply Device 90, Power Supply Device 92), and wherein the interconnect arrangement (Power sharing cables 94, 96 and 98) includes interconnects that connect the load to each of the first, second, and third sources, and wherein the interconnect arrangement includes interconnects that connect the load to each of the first, second, and third sources (As shown in figure 3 the Device circuit 88 is connected by means of Power sharing cables 94, 96 and 98 to the three power supplies, Column 7 lines 45-48).

However, Koch in view of Coglitore does not disclose expressly that the load is an 8X watts load, and that the first, second, and third Source are 4X watts sources. Koch discloses that the power sources have to supply the loads with an equal or greater power than that consumed by the loads (Column 7 lines 49-60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide sources in Koch invention that produce greater power than the power consumed by the load when combined together, namely to have one load and three power sources that each produced half the power consumed by the load, since the load is connected to each of the power supplies when one supply fails the other supplies provide the necessary power to the load.

The suggestion or motivation for doing so would have been to have power supplies that produces enough power to supply a load when one of the power supplies fails, thus increasing reliability of the redundancy of the system without having to worry about the load being without power.

5. Claims 7- 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Koch (US 6,153,946) in view of Coglitore (US 2004/0228087) in further view of Slade (US 5,861,684).

With respect to claim 7 Koch in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load, power source and interconnect arrangement comprises a power distribution subsystem, however, Koch in view of Coglitore does not disclose expressly that the at least one load includes a 5X watt load, and the plurality of sources includes first, second, third, fourth, fifth, and sixth 2X watt sources, and wherein the interconnect arrangement includes interconnects that connect the 5X watt load to each of the first, second, third, fourth, fifth, and sixth 2X watt sources.

Slade discloses Bulk supplies A, B, C, D and Batteries A, B, C, D that power two power rails A 2 and B 3. With a total power in the rail of 3000 Watts with 2N configuration, thus one of ordinary skill in the art would have connected the 5X watt load to Koch and Coglitore system and still have enough power to supply the load. Power rails interconnect each of the sources with the load; the loads in Slade invention are "CRUs" of a computer system.

The suggestion or motivation for doing so would have been that even if one of the sources fails the load would still be fully powered, to increase reliability and redundancy of the system.

With respect to claim 8 Koch in view of Coglitore disclose the power distribution system of claim 1, Koch in view of Coglitore, however, do not disclose expressly that the at least one load includes a 10X watt load, wherein the plurality of sources includes first, second, third, fourth, fifth, and sixth 2X watt sources, and wherein the interconnect arrangement includes interconnects that connect the 10X watt load to each of the first, second, third, fourth, fifth, and sixth 2X watt sources.

Slade discloses Bulk supplies A, B, C, D and Batteries A, B, C, D that power two power rails A 2 and B 3. With a total power in one of the rails being 3000 Watts with 2N configuration, thus one of ordinary skill in the art would have connected the 10X watt load to Koch and Coglitore system and also change the bus bar switch 15 of figure 1 to connect the Bulk supplies B and D to Rail A 2 so that the rail can now have 6000 Watts. Thus, have enough power to supply the 10X watts load.

The suggestion or motivation for doing so would have been that even if one of the sources fails the load would still be fully powered, to increase reliability and redundancy of the system.

With respect to claim 9 Koch in view of Coglitore disclose the power distribution system of claim 1, however, do not disclose expressly that the at least one load includes first, second, third, fourth, fifth, and sixth X watt loads, wherein the plurality of sources includes first, second, and third 4X watt sources, and wherein the interconnect

arrangement includes interconnects that connect each of the X watt loads to two of the 4X watt sources while connecting each of the 4X watt sources to four different ones of the X watt loads.

Slade discloses Bulk supplies A, B, C, D and Batteries A, B, C, D that power two power rails A 2 and B 3, and a plurality of loads 1-N. The loads are being power/interconnected by the rails. The power sources have to adjust their power in order to supply the each of the loads with a corresponding power (Column 3 lines 5-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modify the system disclosed by Koch and Coglitore to include the power supplies and the loads disclosed by Slade and interconnects that connect each of the loads to two of the power sources.

The suggestion or motivation for doing so would have been that even if one of the sources fails the load would still be fully powered, to increase reliability and redundancy of the system, by providing sources that supply a greater power than that consumed by the load.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1-2, 5-8, 12-14 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,3-4,6,8,22 of copending Application No. 10/777917 in view of Coglitore (US 2004/0228087).

Although the conflicting claims are not identical, they are not patentably distinct from each other.

With respect to claim 1, claim 1 of copending application discloses a power distribution system comprising: at least one load (a bank of loads); a plurality of power sources (a bank of sources), and an interconnect arrangement (interconnect arrangement) including a plurality of interconnects (Plurality of interconnects), the interconnects connecting each load to a given number of the sources (the interconnect connecting each load to one or more sources) so that each load is fully powered and if any one source fails, all loads of the at least one load remain fully powered (so as to be fully power by sources of both the first and second groups of sources and such that if any one source or all sources of one of the groups of sources fails, all of the loads remain fully powered). Copending application, however, does not disclose expressly that each of the at least one load is operable to be mounted in a rack location; and that each power source is operable to be mounted in a rack location not having a load.

Coglitore discloses on page 9 paragraph (0078) and paragraph (0081), that power supplies modules 6 and computing units 8 (loads) of figures 7A, 7B and figure 9 are housed in separate racks. The power supplies are mounted in the rack without a load, as described by Coglitore.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Coglitore with copending application.

The suggestion or motivation for doing so would have been to facilitate the cooling of the electronic components as disclosed by Coglitore.

With respect to claim 2, claim 8 of copending application in view of Coglitore disclose the power distribution system of claim 1 wherein all of the sources are DC sources (AC sources each provide a DC voltage with a one thousand watt capacity).

With respect to claim 5, claim 3 of copending application in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load, power source and interconnect arrangement comprises a power distribution subsystem (dividable into subsystems), wherein the at least one load includes a 2X watt load (Two 2X watt load), wherein the plurality of sources includes first and second 2X watt sources (Two 2X watt first group sources), and wherein the interconnect arrangement includes interconnects that connect the 2X watt load to each of the first and second 2X watt sources (each of the 2X watt loads are connected to a different one of the 2X watt first group sources).



With respect to claim 6, claim 4 of copending application in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one loads, power sources and interconnect arrangement comprises a power distribution subsystem, wherein the at least one load includes a 4X watt load (One 4X watt load), wherein the plurality of sources includes first, second, and third 2X watt sources (two 2X watt and one 4X watt second group sources), and wherein the interconnect arrangement includes interconnects that connect the 4X watt load to each of the first, second, and third 2X watt sources (the 4X watt load is connected to the 2X watt first group sources and to the 4X watt second group source).

With respect to claim 7, claim 6 of copending application in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load, power source and interconnect arrangement comprises a power distribution subsystem, wherein the at least one load includes a 5X watt load (12X watt load), and the plurality of sources includes first, second, third, fourth, fifth, and sixth 2X watt sources (six 2X watt first group sources), and wherein the interconnect arrangement includes interconnects that connect the 5X watt load to each of the first, second, third, fourth, fifth, and sixth 2X watt sources (the 12X watt load is connected to all of the 2X watt first group sources).

With respect to claim 8, claim 6 of copending application in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load includes a 10X watt load (12X watt load), wherein the plurality of sources includes first, second, third, fourth, fifth, and sixth 2X watt sources (six 2X watt first group sources), and

wherein the interconnect arrangement includes interconnects that connect the 10X watt load to each of the first, second, third, fourth, fifth, and sixth 2X watt sources (the 12X watt load is connected to all of the 2X watt first group sources).

With respect to claim 12, claim 6 of copending application in view of Coglitore disclose the power distribution system of claim 1 wherein the at least one load includes an 8X watt load (one 12X watt load), wherein the plurality of sources includes first, second, and third 4X watt sources (three 4X watt second group sources), and wherein the interconnect arrangement (interconnects) includes interconnects that connect the 8X watt load to each of the first, second, and third 4X watt sources, and wherein the interconnect arrangement includes interconnects that connect the 8X watt load to each of the first, second, and third 4X watt sources (the 12X watt load is connected to all of the 4X watt second group sources).

With respect to claim 13, claim 1 of copending application discloses a power distribution system comprising: a plurality of loads (a bank of load); a plurality of power sources (a bank of sources), the power sources having a collective capacity to fully power all of the loads (connecting each load to both the first and second groups of sources so as to be fully powered by the sources), and an interconnect arrangement (interconnect arrangement) including a plurality of interconnects (Plurality of interconnects), the interconnects connecting each load to a given number of different ones of the sources so that each load is fully powered notwithstanding failure of any one of the sources (the interconnects connecting each load to one or more sources of both

the first and second groups of sources and such that if any one source or all sources of one of the groups of sources fails, all of the loads remain fully powered).

Copending application, however, does not disclose expressly that each load is operable to be mounted in a rack location; and that each power source is operable to be mounted in a rack location not having a load.

Coglitore discloses on page 9 paragraph (0078) and paragraph (0081), that power supplies modules 6 and computing units 8 (loads) of figures 7A, 7B and figure 9 are housed in separate racks. The power supplies are mounted in the rack without a load, as described by Coglitore.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Coglitore with copending application.

The suggestion or motivation for doing so would have been to facilitate the cooling of the electronic components as disclosed by Coglitore.

With respect to claim 14, claim 22 of copending application discloses a method of distributing full power to each one of a plurality of loads (method of distributing power to a bank of loads) comprising providing a plurality of power sources (a bank of sources), the power sources being sufficient in number and capacity such that a combination of less than all of the sources is sufficient to power each load (connecting each load to one or more sources of both the first and second groups of sources to enable sources of both the first and second groups of sources fully power the loads); and connecting each load to a given number of the sources so that if any one source fails, each of the loads

remains fully powered (such that if any of the one or more of the sources of one of the groups of sources fails, all of the loads remain fully powered).

Copending application, however, does not disclose expressly that each load is operable to be mounted in a rack location; and that each power source is operable to be mounted in a rack location not having a load.

Coglitore discloses on page 9 paragraph (0078) and paragraph (0081), that power supplies modules 6 and computing units 8 (loads) of figures 7A, 7B and figure 9 are housed in separate racks. The power supplies are mounted in the rack without a load, as described by Coglitore.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined the teachings of Coglitore with copending application.

The suggestion or motivation for doing so would have been to facilitate the cooling of the electronic components as disclosed by Coglitore.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### **Conclusion**

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

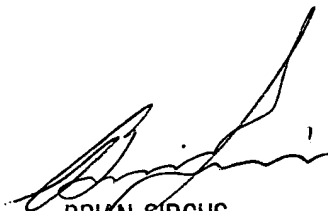
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Amaya whose telephone number is (571) 272-8941. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on (571) 272-2800. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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